### COURSE CRITIQUE

scale given. Comment belo	xcellent respectively) by placin by question where indicated. U	
pages if needed.		
FORM		RATING
1. Format of the course was intendent to time commitment and to provide of a particular topical area. Please	for a full-day class treatment	
	1 day/month 4 hours/every 2 weeks	1 10 1 2
Other Alternatives: This depends with one day sessions. When trasignificant factor.	on location. Less travel to the velocity of th	
2. The point of the applications sescurrent course material was utilized rate effectiveness:		
	Material relevance Applications speakers	1 8 1 8
3. The purpose of the homework wa with about 8 hours of work. Please		
	3 one-hour problems 20 ten-minute problems	1 <u>5</u> 1 <u>5</u>
4. The goal of the intermediate 2-h alive" exercise in the topical area. for continuity:	our session was to give a "kee Please rate these alternatives	o-
	Problem-solving session Second applications session	1 <u>5</u> 1 <u>5</u>
Like this idea, but it envolves case my duty station is round trip. This is not a detended however it must be taken in cons	from Hors. This envolves rming factor in attending	sessions,

STAT

5. The class was intended to be weight pictorial development in order to converedily. Please rate:	nted towards a blackboard- vey modelling concepts more		
	Diagrammatic presentation Mix of vuegraphs & chalkboard	1 1 —	8
6. The symbology of various systems the separate source developments. A made in order to permit cross interpoliterature. Please rate effectiveness	n effort at consistency was retation within the technical	•	
	Common symbology	1	7
7. The intent of notes and handout mamonth was to tie course topics to tech	Example illustrations  aterial furnished throughout the mical literature. Please rate:		
month was to the course to pres to tees.			
	Effectiveness of handout reprints	1	9
	Effectiveness of specially developed handouts	1	8
	•	_	
8. General impedimenta such as sam format, etc., for providing continuity	ne room same day/month, same y. Please rate:		
	Room	1	7
	Day	1 -	10
	Daily sequence	-	
9. The course was designed to prese several disciplines. Please rate app	ent a semi-unitary approach to licable areas 1-10:		-
Communications 10 Opti Hum. Eng. & Biomed. 2 Seis Computer Technology 6	ics 9 Acoustics smics 1 Pictorial	5	

SUBSTANCE		· <u>R</u>	ATING	
10. The course material was split commonality subsystems. (Those s in designs across disciplines.) The by ASEE for math modelling related	ubsystems which are pervasi sequence was that recomme	ive nded		
	Balance of material	1	8	10
	Total content	1	8	10
			;	
	w for each session. Please and for the applications given to development.			
11. Session I; Vectorial Representa linear systems, sampling, manipula	•	is,	· · · · · · · · · · · · · · · · · · ·	
	Material	1	NOT	10
	Application	1	ATTENDED	10
12. Session II; Transforms; convolutransformations, Z transforms, impanalysis.		1 1	7 10	10
13. Session III; Probability and State expectancy, density functions, distri		·		
	Material	1	8	10
	Application	1	9	10
14. Session IV; Stochastic Variable moments, correlation, power spectr square law detection.				
	Material	1	8	10
	Application	1 -	10	10
			····	

15. Session V; Signal Detection; valu detection, Bayes Law.	e, cost liklihood ratio	
	Material Application	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	· .	
16. Session VI; Detector Subsystems characteristics, detection situations, and prediction.	I; receiver operating S/N ratio, data smoothing	
	Material Application	1 8 10 1 10 10
17. Session VII; Detector Subsystem whitening, matched filtering, thresholders.	s II; non-white noise, old, detectability Markov	
	Material Application	1 7 10 1 7 10
18. Session VIII; Spatial Processing filtering, correlation matrix for sign	; I; space-time relationships, s nal and noise.	patial
	Material Application	1 8 10 1 9 10
19. Session IX Spatial Processing I filtering, lobe periodicity.	I; optimum array, shading, op	timum
This session not attended. Rating is from study of the handouts only.	Material Application	1 9 10 1 6 10

	Material	1	. 9	10
	Application	1	9	10
	analog modulation, AM, FM, Index of modulation noise immu	•	1	
	Material	1.	8	10
	Application	1	10	10
		•	•	÷
22. Session XII; Modulation; noise immunity, entropy. (C	PPM, PWM, PCM, error cor	rection codes,		•
	Material	1	9	10
	Application	1	<del>9</del>	10

#### COURSE CRITIQUE

Please rate 1-10 (poor to excellent respectively) by placing a check on the scale given. Comment below question where indicated. Use back of

pages if needed. RATING FORM 1. Format of the course was intended to accommodate to a rough 5% time commitment and to provide for a full-day class treatment of a particular topical area. Please rate: 1 day/month 4 hours/every 2 weeks Other Alternatives: 2. The point of the applications session was to illustrate where current course material was utilized in the real world. Please rate effectiveness: Material relevance Applications speakers The purpose of the homework was to exercise topical material with about 8 hours of work. Please rate these: 3 one-hour problems 20 ten-minute problems 4. The goal of the intermediate 2-hour session was to give a "keep-

alive" exercise in the topical area. Please rate these alternatives for continuity:

> Problem-solving session Second applications session 1

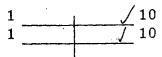
5. The class was intended to be weighted towards a blackboard-pictorial development in order to convey modelling concepts more readily. Please rate:	
Diagrammatic presentation Mix of vuegraphs & chalkboard	1
6. The symbology of various systems disciplines is confusing due to the separate source developments. An effort at consistency was made in order to permit cross interpretation within the technical literature. Please rate effectiveness:	•
Common symbology Example illustrations	1
7. The intent of notes and handout material furnished throughout the month was to tie course topics to technical literature. Please rate:	
Effectiveness of handout reprints Effectiveness of specially developed handouts	1
8. General impedimenta such as same room same day/month, same format, etc., for providing continuity. Please rate:	
Room Day Daily sequence	1 1
9. The course was designed to present a semi-unitary approach to several disciplines: Please rate applicable areas 1-10:	:
Communications 10 Optics Acoustics 1 Hum. Eng. & Biomed. 3 Seismics Pictorial 1 Computer Technology 3	

#### SUBSTANCE

RATING

10. The course material was split 50% basic math tools and 50% in commonality subsystems. (Those subsystems which are pervasive in designs across disciplines.) The sequence was that recommended by ASEE for math modelling related to several fields. Please rate:

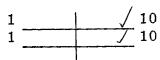
Balance of material Total content



The sequence is given below for each session. Please give your rating for both material content and for the applications given both formally and in the course of concept development.

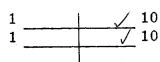
11. Session I; Vectorial Representation; matrices, num. analysis, linear systems, sampling, manipulation

Material Application



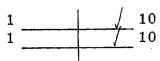
12. Session II; Transforms; convolution, Fourier and Laplace transformations, Z transforms, impulse response, numerical analysis.

Material Application

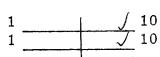


13. Session III; Probability and Statistics; random var., expectancy, density functions, distributions, confidence limits

Material Application



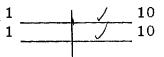
14. Session IV; Stochastic Variable; stationarity, ergodicity, moments, correlation, power spectral density, white noise, square law detection.



15. Session V; Signal Detection detection, Bayes Law.	n; value, cost liklihood ratio	
••	Material Application	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
16. Session VI; Detector Subscharacteristics, detection situand prediction.	ystems I; receiver operating ations, S/N ratio, data smooth	ning
:	Material Application	$\begin{array}{c c} 1 & & & \downarrow & 1 \\ 1 & & & & \downarrow & 1 \end{array}$
17. Session VII; Detector Subwhitening, matched filtering, chains.	systems II; non-white noise, threshold, detectability Marko	v
	Material Application	$\begin{array}{c c}1\\1\\\hline\end{array}$
18. Session VIII; Spatial Proc filtering, correlation matrix f	cessing I; space-time relations for signal and noise.	hips, spatial
	Material Application	$\begin{array}{c c} 1 & & \int & 1 \\ 1 & & & \end{array}$
19. Session IX Spatial Proces	ssing II; optimum array, shadi	ng, optimum

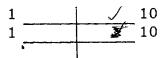
20. Session X; Servomechanisms and Control; closed loop systems, regulation, feedback, root locus, stability criteria, bang-bang systems.

Material Application



21. Session XI; Modulation; analog modulation, AM, FM, PM, supressed band modulation, effects of index of modulation noise immunity.

Material Application



22. Session XII; Modulation; PPM, PWM, PCM, error correction codes, noise immunity, entropy. (Content Only)

1	 <b></b>	10
1		10

#### COURSE CRITIQUE

Please rate 1-10 (poor to excellent respectively) by placing a check on the scale given. Comment below question where indicated. Use back of pages if needed.

#### FORM

RATING

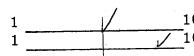
1. Format of the course was intended to accommodate to a rough 5% time commitment and to provide for a full-day class treatment of a particular topical area. Please rate:

1 day/month 4 hours/every 2 weeks

Other Alternatives:

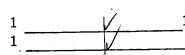
2. The point of the applications session was to illustrate where current course material was utilized in the real world. Please rate effectiveness:

Material relevance Applications speakers



3. The purpose of the homework was to exercise topical material with about 8 hours of work. Please rate these:

3 one-hour problems 20 ten-minute problems



4. The goal of the intermediate 2-hour session was to give a "keep-alive" exercise in the topical area. Please rate these alternatives for continuity:

Problem-solving session 1
Second applications session 1

		•		
5. The class was intended to be wei pictorial development in order to correadily. Please rate:	ghted towards a blackboard- nvey modelling concepts more			
	Diagrammatic presentation	1	1	10
	Mix of vuegraphs & chalkboard	1	/	_10
6. The symbology of various system the separate source developments. made in order to permit cross interliterature. Please rate effectiveness	An effort at consistency was pretation within the technical	· ·	, j	
	Common symbology Example illustrations	1	/.	$_{-10}^{10}$
8. General impedimenta such as sa	Effectiveness of handout reprints Effectiveness of specially developed handouts  ame room same day/month, same	1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_10 _10
format, etc., for providing continue	ity. Please rate:			
	Room	1	-	$-^{10}_{10}$
	Day Daily sequence	1		$\frac{10}{10}$
9. The course was designed to preseveral disciplines: Please rate approximately	sent a semi-unitary approach to oplicable areas 1-10:			
Communications & Or	otics 7 Acoustics 6 Pictorial 4	<del></del>		
Hum. Eng. & Biomed. $\checkmark$ Secomputer Technology $\checkmark$	ismics 6 Pictorial 4			
· · · · · · · · · · · · · · · · · · ·	<u>.</u>			

#### SUBSTANCE

RATING

10. The course material was split 50% basic math tools and 50% in commonality subsystems. (Those subsystems which are pervasive in designs across disciplines.) The sequence was that recommended by ASEE for math modelling related to several fields. Please rate:

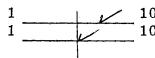
Balance of material Total content



The sequence is given below for each session. Please give your rating for both material content and for the applications given both formally and in the course of concept development.

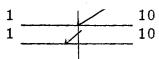
11. Session I; Vectorial Representation; matrices, num. analysis, linear systems, sampling, manipulation

Material Application



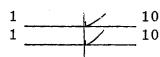
12. Session II; Transforms; convolution, Fourier and Laplace transformations, Z transforms, impulse response, numerical analysis.

Material Application



13. Session III; Probability and Statistics; random var., expectancy, density functions, distributions, confidence limits

Material Application



14. Session IV; Stochastic Variable; stationarity, ergodicity, moments, correlation, power spectral density, white noise, square law detection.

L	/	10
L	/	10

15. Session V; Signal Detection; valudetection, Bayes Law.	e, cost liklihood ratio	
	Material Application	1 / 10
16. Session VI; Detector Subsystems characteristics, detection situations, and prediction.	SI; receiver operating S/N ratio, data smoothing	
	Material Application	1 / 10
17. Session VII; Detector Subsystem whitening, matched filtering, threshochains.	s II; non-white noise, old, detectability Markov	
	Material Application	1 / 10
18. Session VIII; Spatial Processing filtering, correlation matrix for sign	I; space-time relationships, s nal and noise.	patial
	Material Application	1 / 10
19. Session IX Spatial Processing II filtering, lobe periodicity.	I; optimum array, shading, op	timum
	Material Application	1 10
		ı

	Material	1 1	10
	Application	1	10
		NO COMMENT	
	on; analog modulation, AM, FM, of index of modulation noise imm		
	Material	1 1	10
	Application	1	1(
•		NO COMMENT	:
22. Session XII; Modulati noise immunity, entropy.	on; PPM, PWM, PCM, error co (Content Only)	rrection codes,	•
	Material	1	10
	Application	1	10
		No comment	

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2	а Ь	96-	13	8.0			
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4	о 6	46	10	4,6	1,6		
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8	а <b>b</b>	86	12	6.6	1.7_		
7	a	105	17	7.5	1.8		
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8	a	67	13	5.1 7.5	2.1		
	<b>b</b>	97 8 <b>9</b>	13	6.9	21		. पूर्व म <del>ाह्यकुर्वकार्य अन्य प्रदेशकार साराम्य कर वे कार सावर्थकार प्रदेशकार प्रदेशकार माह्य प्रदेश</del> कार अपने वार करन
9	a	107	12	8,9	0.9		
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	4	64	12	5.7	1.9		
	d	63	10	5.3	2.2		
	e 5	53	10	5,9	17		
	8	40	9	4,4	1.4		
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12	a	90	12	7.5	1.3		
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13	а b	88 82	12	6.8	1.7		
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. ,	5	84	12	7.0	0.8		
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/6	6	59	· · · · · · · · · · · · · · · · · · ·	8,4	1.0		
17	a	56	7 7	7.7	0.4		
	<u>b</u>	54 55	7	7.8	0.7		
	6 6	49	7	70	1,0		www.midrocolors.fractificity.org/colors/colors/colors/2006/colors/241-471-1.
19	a	72	9	8,0	0.9		
	<u> </u>	63	8	8.4	0.6		
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		956	113	7.77	.34
QUESTIONS TAROGH T	10	45	9	$\bar{R} \left( \frac{\bar{E}\bar{I}}{\bar{q}} \right)$	OR
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